THE OFFICE OF REGULATORY STAFF DIRECT TESTIMONY AND EXHIBITS

OF

JOSEPH W. COATES

May 29, 2014



DOCKET NO. 2014-1-E

ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF DUKE ENERGY PROGRESS, INCORPORATED

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1		DIRECT TESTIMONY AND EXHIBITS OF							
2		JOSEPH W. COATES							
3		ON BEHALF OF							
4	THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF								
5		DOCKET NO. 2014-1-E							
6		IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF							
7		DUKE ENERGY PROGRESS, INCORPORATED							
8	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND							
9		OCCUPATION.							
10	A.	My name is Joseph W. Coates. My business address is 1401 Main Street,							
11		Suite 900, Columbia, South Carolina, 29201. I am employed by the South							
12		Carolina Office of Regulatory Staff ("ORS") in the Audit Department, as an							
13		Auditor.							
14	Q.	PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND							
15		EXPERIENCE.							
16	A.	I received a Bachelor of Science Degree in Finance from the University of							
17		South Carolina in August 2008. In February 2009, I began my employment with							
18		ORS and have been involved in cases related to the regulation of electric, gas,							
19		telecommunications, water and wastewater companies. I have previously testified							
20		before the Public Service Commission of South Carolina ("PSC") in electric rate							
21		cases, a water rate case, and a fuel case.							

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1	Q.	WHAT	IS	THE	PURPOSE	OF	YOUR	TESTIMONY	IN	THIS
2		PROCE	EDI	NG?						

A. The purpose of my testimony is to present the results of ORS Audit Staff's examination of the books and records pertaining to Duke Energy Progress, Inc.'s ("the Company" or "DEP") operations under the Fuel Adjustment Clause ("FAC"). The current fuel examination covered the actual period of March 2013 through February 2014 ("actual review period") and four (4) estimated months from March 2014 to June 2014 ("estimated review period").

9 Q. WHAT WAS THE PURPOSE OF THIS EXAMINATION?

A. The purpose of this examination was to determine if the Company's accounting practices in computing and applying the monthly FAC have been in compliance with S.C. Code Ann. §58-27-865 (Supp. 2013).

13 Q. WHAT WAS THE SCOPE OF ORS'S EXAMINATION?

ORS Audit Staff examined and verified the monthly fuel adjustment factor calculations and the fuel recovery balances recorded in the Company's books and records. The Audit Staff's examination consisted of the following:

1. Analyzing the Fuel Stock Account

ORS's analysis of the Fuel Stock Account consisted of verifying receipts to, and issues from, the fuel management system to the general ledger, examining monthly fuel charges originating in fuel accounting, and ensuring that only proper charges were entered in the Company's computation of fuel costs for purposes of adjusting the base fuel factor.

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2. Sampling Receipts to the Fuel Stock Account

ORS's review of receipts to the Fuel Stock Account consisted of examining and testing selected transactions which support additions to the account. Each transaction examined was tested for mathematical accuracy and vouched to a corresponding supplier invoice, fuel stock detail report, and freight invoice report. Transactions were then verified to a fuel management system payment voucher to verify payment of the correct amount to the vendors.

3. Verifying Charges to Nuclear Fuel Expense

ORS verified the amounts of nuclear fuel expense to the books and records for the actual review period. Additionally, the accuracy of these amounts was confirmed to the Company's amortization schedules.

4. Verifying Purchased and Interchange Power Fuel Costs

ORS verified the Company's purchased and interchange power fuel costs, kilowatt-hour ("kWh") purchases, and kWh sales for the actual review period to summary "Booking Run" reports, individual vendor purchase schedules, and monthly invoices, on a sample basis. This included intercompany power transactions related to the Joint Dispatch Agreement between the Company and Duke Energy Carolinas, LLC. ORS recomputed the Company's sales and purchases for the actual review period. The purchased and interchange power amounts for the actual review period and the resultant over (under)-recovery monthly deferred fuel amounts for the period reflect calculations which conform to S.C. Code Ann. §58-27-865 (Supp. 2013). This statute addresses fuel costs related to purchased power. Subsection (A)(2)(b) of this statute

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states that the total delivered cost of economy purchases, including (but not limited to) transmission charges, are included in purchased power costs if those purchases are "less than the purchasing utility's avoided variable costs for the generation of an equivalent quantity of electric power." ORS applied this statute to the examined economic purchases along with the applicable avoided costs.

5. Verifying kWh Sales

ORS verified total system kWh sales, as filed in the monthly fuel factor computation, to monthly billed revenue reports for the actual review period. The monthly kWh sales figures were then used to determine the fuel cost per kWh sold and to compute the monthly S.C. retail allocation factors.

6. Recalculating the Monthly S.C. Allocation Factors and Verifying the Deferred Fuel Costs

ORS recalculated the S.C. allocation factors for the actual review period utilizing information obtained from the Company's records and verified these factors to the Company's books and records. In recalculating the monthly factors, ORS divided the S.C. kWh sales by the total system kWh sales. The monthly S.C. allocation factor was then multiplied by the monthly total fuel costs to produce the S.C. retail basis of total fuel costs. The comparison was then made, in dollars, between the actual monthly fuel costs on a S.C. retail basis and the revenue billed to S.C. customers. The difference in the comparison was the monthly deferred fuel entry. The actual deferred fuel costs for each month were then verified to the Company's books and records.

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1		7. Recalculating the True-up for the Over (Under)-Recovered Fuel Costs
2		ORS analyzed and recomputed the cumulative over (under)-recovery of base
3		fuel costs for the actual review period and over (under)-recovery for the
4		estimated review period. In addition, ORS recomputed the cumulative over
5		(under)-recovery of environmental fuel costs for the actual review period and
6		over (under)-recovery for the estimated review period.
7	Q.	PLEASE EXPLAIN THE AUDIT EXHIBITS ATTACHED TO YOUR
8		TESTIMONY.
9	A.	ORS prepared audit exhibits from the Company's books and records,
10		reflecting fuel costs during the actual review period. Specifically, these exhibits
11		include the following:
12		AUDIT EXHIBIT JWC-1: COAL COST STATISTICS
13		This audit exhibit details spot and contract coal received, separately and
14		combined, for the actual review period. The comparison is made in the following
15		five (5) areas:
16		(1) Tons Received
17		(2) Percentage of Total Tons Received
18		(3) Cost Per Ton Received
19		(4) Total Received Cost
20		(5) Cost Per thousand British thermal units ("MBTU")
21		ORS then took the combined total received cost for the twelve (12) months and
22		divided this by the combined total tons received for the twelve (12) months to
23		arrive at a weighted average cost per ton of \$89.32 for the actual review period.

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1	AUDIT EXHIBIT JWC-2: RECEIVED COAL – COST PER TON (PER
2	PLANT)
3	This audit exhibit details the received cost per ton of coal at each plant during the
4	actual review period, in dollars per ton, including freight costs.
5	AUDIT EXHIBIT JWC-3: RECEIVED COAL - COST PER TON
6	COMPARISON
7	This audit exhibit details the received cost per ton of coal for each month of the
8	actual review period for DEP, Duke Energy Carolinas, LLC, and South Carolina
9	Electric & Gas Company. For comparison purposes, ORS has shown the invoice
10	cost per ton, freight cost per ton, total cost per ton, and the cost per MBTU.
11	AUDIT EXHIBIT JWC-4: TOTAL BURNED COST (FOSSIL AND
12	NUCLEAR)
13	This audit exhibit details the per book cost of fuel burned for electric generation
14	during the actual review period. The burned cost of each class of fuel is shown
15	separately along with its percentage of total burned costs. These costs are used in
16	the computations of the base fuel cost component. Emission allowance expenses
17	and other variable environmental costs, as described in §58-27-865 (A)(1), are
18	shown separately on Audit Exhibit JWC-6.
19	AUDIT EXHIBIT JWC-5: SOUTH CAROLINA FUEL COST
20	COMPUTATION
21	This audit exhibit details the fuel cost computations for the actual review period
22	as well as fuel costs for the estimated review period. The exhibit also shows the
23	actual and estimated computations of the cumulative over (under)-recovery THE OFFICE OF REGULATORY STAFF

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1		balances, various adjustments for March 2013 through June 2014, and the
2		allocations of coal blending, coal purchases, gas, and nuclear fuel savings.
3		AUDIT EXHIBIT JWC-6: TOTAL ENVIRONMENTAL COSTS
4		This audit exhibit details the total environmental costs for the actual review period
5		for magnesium hydroxide and calcium carbonate, sulfur dioxide ("SO2") and
6		nitrogen oxide ("NOx") emission allowances, ammonia, urea and limestone.
7		Additionally, the percentage of total cost is shown for each environmental
8		component.
9		AUDIT EXHIBIT JWC-7: DETAILS OF ENVIRONMENTAL COSTS
10		This audit exhibit details the environmental cost computations for the actual
11		review period for magnesium hydroxide and calcium carbonate, SO ₂ and NOx
12		emission allowances, ammonia, urea, limestone and estimates of variable
13		environmental costs for the estimated review period. The exhibit also shows the
14		computation of the cumulative over (under)-recovery balances for March 2013
15		through June 2014, the allocations of reagent savings, and an ORS adjustment.
16	Q.	WOULD YOU PLEASE EXPLAIN THE CUMULATIVE OVER (UNDER)-
17		RECOVERY AMOUNT BROUGHT FORWARD IN AUDIT EXHIBIT
18		JWC-5?
19	A.	Yes. As detailed in Audit Exhibit JWC-5, ORS brought forward a
20		cumulative over-recovery balance of \$895,511 from February 2013. The
21		Company's testimony (McGee Exhibit 2) reflects a cumulative over-recovery
22		balance of \$895,513 brought forward from February 2013.

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1 Q. PLEASE ELABORATE ON ORS AUDIT STAFF'S COMPUTATION OF 2 THE TRUE-UP OF OVER (UNDER)-RECOVERED FUEL COSTS.

ORS Audit Exhibit JWC-5 provides details of ORS's calculation of the actual cumulative (under)-recovery balance through February 2014, and the estimated balance through June 2014. The cumulative (under)-recovery amount as of February 2014 totaled (\$21,559,994). ORS then added an estimated (under)-recovery of (\$4,939,740) for March 2014 and estimated over-recoveries of \$3,167,537 for April 2014, \$2,495,882 for May 2014, and \$98,089 for June 2014. Also, ORS added the Company's adjustment of \$1,673,255 and an ORS adjustment of \$343,999 in the estimated month of March 2014, later explained as Adjustments (4) and (5) respectfully, to arrive at a cumulative (under)-recovery of (\$18,720,972) through June 2014. The Company's testimony (McGee Exhibit 2) in this docket reports the cumulative (under)-recovery total through February 2014 as (\$21,567,436) and through June 2014, the cumulative (under)-recovery totals (\$19,554,355).

The difference of \$7,442, between ORS's and the Company's balance as of February 2014, is due to the Company transitioning from the S.C. allocation method of computing the monthly deferred fuel entry to using the difference between a billed factor and an incurred factor method to compute the deferred fuel entry. ORS continued to use the S.C. allocation method to be consistent with how the Company submitted their monthly filings to the PSC for the review period.

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1		The difference of \$833,383, between ORS's and the Company's balance
2		as of June 2014, consists of an additional \$343,999 over-recovery to the
3		Company's adjustment (4), a \$494,649 over-recovery difference due to ORS's
4		recalculation of the Company's billed factors used for the estimated months of
5		April through June 2014, as well as a (\$5,265) variance due to the different
6		calculation methods described above.
7	Q.	DID THE COMPANY MAKE ANY ADJUSTMENTS OR TRUE-UPS
8		DURING THE ACTUAL REVIEW PERIOD FOR THE BASE FUEL
9		COMPONENT?
10	A.	Yes. The Company made the following adjustments as shown on Audit
11		Exhibit JWC-5:
12		Adjustment (1) - In September 2013, the Company made an over-recovery
13		adjustment of \$199,743 to account for revised renewable energy purchases made
14		in June 2013, July 2013, and August 2013.
15		Adjustment (2) - In October 2013, the Company made an over-recovery
16		adjustment of \$13,274 to revise purchased power expenses from August 2013.
17		Adjustment (3) - During the actual review period it was determined that the cost
18		of certain power purchases exceeded the "utility's avoided variable costs for the
19		generation of an equivalent quantity of power." Accordingly, the Company made
20		an adjustment in February 2014 to the deferred fuel account balance that
21		recognizes the exclusion of those types of costs from purchased power
22		transactions. The effect of the system avoided costs reduction adjustment of

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1 \$836,540 resulted in an over-recovery adjustment of \$97,372 on a S.C. retail 2 jurisdictional basis. 3 Adjustment (4) – In March 2014, the Company made an over-recovery adjustment of \$1,673,255 to revise cogeneration and renewable energy purchases 4 5 from April 2013 through December 2013. 6 ORS examined and recomputed the previous adjustments with no exceptions 7 noted. 8 Q. DID ORS MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING THE 9 ACTUAL REVIEW PERIOD FOR THE BASE FUEL COMPONENT? 10 A. Yes. ORS made the following adjustment as shown on Audit Exhibit 11 JWC-5: 12 Adjustment (5) - ORS made an over-recovery adjustment in March 2014 to 13 account for an additional \$343,999 that was excluded from the Company's 14 Adjustment (4). 15 Q. WOULD YOU PLEASE EXPLAIN THE CUMULATIVE OVER (UNDER)-16 RECOVERY BALANCE BROUGHT FORWARD IN AUDIT EXHIBIT 17 **JWC-7?** 18 A. Yes. As detailed in Audit Exhibit JWC-7, ORS brought forward a 19 cumulative over-recovery balance of \$318,611 from February 2013. The 20 Company's testimony (McGee Exhibit 4) reflects a cumulative over-recovery 21 balance of \$318,605 brought forward from February 2013.

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1	Q.	PLEASE ELABORATE ON ORS AUDIT STAFF'S COMPUTATION OF					
2		THE TRUE-UP OF OVER (UNDER)-RECOVERED ENVIRONMENTAL					
3		COSTS.					
4	A.	ORS Audit Exhibit JWC-7 provides details of ORS's calculation of the					
5		cumulative environmental cost over-recovery balance of \$558,581 through					
6		February 2014. ORS then added an estimated (under)-recovery of (\$100,953) for					
7		March 2014, over-recovery of \$19,217 for April 2014, (under)-recoveries of					
8		(\$6,452) for May 2014 and (\$36,290) for June 2014 to arrive at a cumulative					
9		over-recovery balance of \$434,103 through June 2014. The Company's testimony					
10		(McGee Exhibit 4) in this docket reports the combined cumulative environmental					
11		cost over-recovery total through February 2014 as \$567,209 and through June					
12		2014 as \$445,527.					
13	Q.	DID THE COMPANY OR ORS MAKE ANY ADJUSTMENTS OR TRUE-					
14		UPS DURING THE ACTUAL REVIEW PERIOD FOR THE					
15		ENVIRONMENTAL COST COMPONENT?					
16	A.	No.					
17	Q.	WHAT ARE THE COMBINED CUMULATIVE OVER (UNDER)-					
18		RECOVERIES OF THE BASE FUEL COST AND ENVIRONMENTAL					
19		COST COMPONENTS AS OF ACTUAL FEBRUARY 2014 AND AS OF					
20		ESTIMATED JUNE 2014?					
21	A.	As of February 2014, the combined result of the base fuel cost component					
22		cumulative (under)-recovery balance of (\$21,559,994) and the environmental cost					
23		component cumulative over-recovery balance of \$558,581 totals (\$21,001,413). THE OFFICE OF REGULATORY STAFF					

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1 As of June 2014, the combined result of the base fuel cost component cumulative 2 (under)-recovery balance of (\$18,720,972) and the environmental cost component 3 cumulative over-recovery balance of \$434,103 totals (\$18,286,869). WHAT IS THE RESULT OF THE ORS'S EXAMINATION? 4 Q. 5 Based on ORS Audit Staff's examination of the Company's books and A. 6 records, and the Company's operations under the fuel cost recovery mechanism, it 7 is ORS's opinion that, subject to ORS's adjustments to the base fuel and

compliance with S.C. Code Ann. §58-27-865 (Supp. 2013).

environmental cost components, the Company's accounting practices are in

- 10 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 11 A. Yes, it does.

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Duke Energy Progress, Inc. Coal Cost Statistics March 2013 - February 2014 Docket No. 2014-1-E

(1) (2) (3) (4) (5)

SPOI									
Tons Received	Percentage of Total Tons Received	Cost Per Ton Received	Total Received Cost	<u>\$/MBTU</u>					
Tons	%	\$	\$	\$					
0	0.00%	0.00	0	0.0000					
(229)	-0.06%	69.58	(15,911)	2.6519					
0	0.00%	0.00	0	0.0000					
0	0.00%	0.00	0	0.0000					
0	0.00%	0.00	0	0.0000					
0	0.00%	0.00	0	0.0000					
0	0.00%	0.00	0	0.0000					
0	0.00%	0.00	0	0.0000					
11,701	2.01%	83.11	972,505	3.2487					
22,865	4.01%	81.52	1,863,996	3.2841					
23,533	5.86%	84.36	1,985,337	3.4400					
213,119	38.72%	77.72	16,564,285	3.1447					
270,989			21,370,212						
	Tons 0 (229) 0 0 0 0 0 11,701 22,865 23,533 213,119	Tons Received Percentage of Total Tons Received Tons % 0 0.00% (229) -0.06% 0 0.00% 0 0.00% 0 0.00% 0 0.00% 0 0.00% 0 0.00% 11,701 2.01% 22,865 4.01% 23,533 5.86% 213,119 38.72%	Tons Received Percentage of Total Tons Received Cost Per Ton Received Tons % \$ 0 0.00% 0.00 (229) -0.06% 69.58 0 0.00% 0.00 0 0.00% 0.00 0 0.00% 0.00 0 0.00% 0.00 0 0.00% 0.00 0 0.00% 0.00 11,701 2.01% 83.11 22,865 4.01% 81.52 23,533 5.86% 84.36 213,119 38.72% 77.72	Tons Received Percentage of Total Tons Received Cost Per Ton Received Total Received Received Cost Tons % \$ 0 0.00% 0.00 0 (229) -0.06% 69.58 (15,911) 0 0.00% 0.00 0 0 0.00% 0.00 0 0 0.00% 0.00 0 0 0.00% 0.00 0 0 0.00% 0.00 0 0 0.00% 0.00 0 11,701 2.01% 83.11 972,505 22,865 4.01% 81.52 1,863,996 23,533 5.86% 84.36 1,985,337 213,119 38.72% 77.72 16,564,285					

CONTRACT

Month	Tons Received	Percentage of Total Tons Received	Cost Per Ton Received	Total Received Cost	<u>\$/MBTU</u>
	Tons	%	\$	\$	\$
Mar-13	485,946	100.00%	102.26	49,691,389	4.1031
Apr-13	397,814	100.06%	90.25	35,900,808	3.6045
May-13	490,964	100.00%	90.96	44,655,899	3.6190
Jun-13	574,410	100.00%	94.96	54,547,685	3.8408
Jul-13	541,561	100.00%	99.74	54,016,408	4.0731
Aug-13	801,505	100.00%	90.56	72,588,281	3.6566
Sep-13	758,620	100.00%	69.04	52,373,929	2.7915
Oct-13	546,292	100.00%	86.20	47,090,312	3.4905
Nov-13	569,054	97.99%	92.75	52,779,392	3.7479
Dec-13	547,847	95.99%	93.02	50,962,694	3.7083
Jan-14	378,387	94.14%	92.54	35,015,142	3.7085
Feb-14	337,240	61.28%	81.50	27,485,490	3.3657
Total	6,429,640			577,107,429	

Duke Energy Progress, Inc. Coal Cost Statistics March 2013 - February 2014 Docket No. 2014-1-E

(1) (2) (3) (4) (5)

COMBINED Percentage of **Cost Per** Total **Tons Received Total Tons Received Tons Received Received Cost** Month \$/MBTU \$ Tons % \$ \$ 485,946 100.00% 102.26 49,691,389 4.1031 Mar-13 397,585 Apr-13 100.00% 90.26 35,884,897 3.6050 3.6190 May-13 490,964 100.00% 90.96 44,655,899 Jun-13 574,410 100.00% 94.96 54,547,685 3.8408 Jul-13 541,561 100.00% 99.74 54,016,408 4.0731 801,505 Aug-13 100.00% 90.56 72,588,281 3.6566 Sep-13 758,620 2.7915 100.000% 69.04 52,373,929 Oct-13 546,292 100.00% 86.20 47,090,312 3.4905 Nov-13 580,755 100,00% 92.56 53,751,897 3.7375 Dec-13 570,712 100.00% 92.56 52,826,690 3.6915 Jam-14 401,920 100.00% 92.06 37,000,479 3.6931 Feb-14 550,359 100.00% 80.04 44,049,775 3.2790 **Total** 6,700,629 598,477,641

Total Received Cost = $\frac{$598,477,641}{$600,600}$ = \$89.32 (Weighted Average Cost of Coal)

Total Tons Received = 6,700,629

Duke Energy Progress, Inc. Received Coal - Cost Per Ton (Per Plant) March 2013 - February 2014 Docket No. 2014-1-E

Plant	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Asheville	90.16	91.93	95.63	93.94	96.92	90.03	64.82	92.47	91.60	90.17	89.13	80.82
Mayo	56.12	96.83	88.10	89.16	95.45	0.00	13.85	88.74	94.16	98.28	94.90	79.65
Roxboro	87.64	100.51	93.64	91.34	92.28	90.95	83.46	96.28	91.10	92.26	90.37	88.67
Sutton	0.00	62.60	107.24	117.01	108.35	107.02	117.11	32.55	65.19	177.26	0.00	0.00
System Total	102.26	90.26	90.96	94.96	99.74	90.56	69.04	86.20	92.56	92.56	92.06	80.04

Duke Energy Progress, Inc. Received Coal - Cost Per Ton Comparison March 2013 - February 2014 Docket No. 2014-1-E

Duke Energy Progress, Inc.

<u>Month</u>	Invoice Cost Per Ton	Freight Cost Per Ton	Total Cost Per Ton	Cost <u>Per MBTU</u>
	\$	\$	\$	\$
Mar-13	54.29	47.97	102.26	4.1031
Apr-13	60.61	29.65	90.26	3.6050
May-13	62.41	28.55	90.96	3.6190
Jun-13	63.21	31.75	94.96	3.8408
Jul-13	62.85	36.89	99.74	4.0731
Aug-13	61.55	29.01	90.56	3.6566
Sep-13	45.42	23.62	69.04	2.7915
Oct-13	58.98	27.22	86.20	3.4905
Nov-13	59.85	32.71	92.56	3.7375
Dec-13	60.60	31.96	92.56	3.6915
Jan-14	58.39	33.67	92.06	3.6931
Feb-14	53.94	26.10	80.04	3.2790

Duke Energy Carolinas, LLC1

Month	Invoice Cost Per Ton	Freight Cost Per Ton	Total Cost Per Ton	Cost <u>Per MBTU</u>
	\$	\$	\$	\$
Mar-13	65.70	30.83	96.53	3.9442
Apr-13	65.46	32.65	98.11	4.0129
May-13	69.85	36.13	105.98	4.2598
Jun-13	70.14	32.49	102.63	4.1048
Jul-13	67.87	35.76	103.63	4.2104
Aug-13	67.31	35.24	102.55	4.1589
Sep-13	70.23	31.25	101.48	4.1176
Oct-13	70.59	31.50	102.09	4.1196
Nov-13	68.23	33.84	102.07	4.1642
Dec-13	66.61	34.05	100.66	4.2635
Jan-14	61.03	34.22	95.25	3.9693
Feb-14	59.00	36.16	95.16	3.8448

Duke Energy Progress, Inc. Received Coal - Cost Per Ton Comparison March 2013 - February 2014 Docket No. 2014-1-E

South Carolina Electric & Gas Company¹

<u>Month</u>	Invoice Cost Per Ton	Freight Cost Per Ton	Total Cost Per Ton	Cost Per MBTU
	\$	\$	\$	\$
Mar-13	76.24	29.92	106.16	4.1400
Apr-13	74.74	32.97	107.71	4.2400
May-13	73.33	29.38	102.71	4.0500
Jun-13	72.48 .	34.56	107.04	4.2300
Jul-13	75.76	32.67	108.43	4.2200
Aug-13	74.12	34.04	108.16	4.2500
Sep-13	76.22	35.33	111.55	4.4000
Oct-13	61.57	28.50	90.07	4.3800
Nov-13	70.02	31.07	101.09	4.0500
Dec-13	70.07	31.59	101.66	4.0200
Jan-14	65.33	30.95	96.28	3.8100
Feb-14	65.04	36.23	101.27	3.9900

¹ Total Cost per Ton information for Duke Energy Carolinas, LLC and South Carolina Electric & Gas Company has not been audited as part of this docket.

Duke Energy Progress, Inc. Total Burned Cost (Fossil and Nuclear) March 2013 - February 2014 Docket No. 2014-1-E

Used for Base Fuel Factor:

									Total			
Month	Co	Coal		<u>Dil</u>	<u>Natural</u>	Gas	Nucl	Nuclear				
	\$	%	\$	%	\$	%	\$	%	\$			
Mar-13	58,597,675	49.92%	2,710,286	2.31%	43,879,362	37.38%	12,195,462	10.39%	117,382,785			
Apr-13	43,580,852	42.14%	767,479	0.74%	47,528,539	45.96%	11,542,621	11.16%	103,419,491			
May-13	39,208,601	36.59%	2,047,344	1.91%	54,947,397	51.27%	10,962,560	10.23%	107,165,902			
Jun-13	67,619,427	48.39%	1,433,941	1.03%	55,922,729	40.02%	14,761,640	10.56%	139,737,737			
Jul-13	75,466,696	48.59%	1,714,639	1.10%	61,774,394	39.78%	16,348,895	10.53%	155,304,624			
Aug-13	72,615,346	48.33%	2,021,397	1.34%	60,133,847	40.02%	15,487,581	10.31%	150,258,171			
Sep-13	50,595,559	41.58%	1,295,218	1.07%	56,204,427	46.19%	13,579,070	11.16%	121,674,274			
Oct-13	37,066,579	34.01%	3,283,218	3.01%	56,073,207	51.44%	12,578,269	11.54%	109,001,273			
Nov-13	49,237,529	38.17%	4,948,408	3.84%	62,900,974	48.77%	11,895,873	9.22%	128,982,784			
Dec-13	39,811,625	31.33%	1,273,036	1.00%	70,886,618	55.78%	15,113,469	11.89%	127,084,748			
Jan-14	62,293,467	25.41%	44,300,180	18.07%	122,324,711	49.90%	16,231,959	6.62%	245,150,317			
Feb-14	71,938,092	54.21%	2,719,939	2.05%	43,102,513	32.48%	14,943,059	11.26%	132,703,603			
		-	-				<u>∮ 8</u>					
Totals	668,031,448	40.79%	68,515,085	4.18%	735,678,718	44.92%	165,640,458	10.11%	1,637,865,709			

Duke Energy Progress, Inc. South Carolina Fuel Cost Computation March 2013 - June 2014 Docket No. 2014-1-E

ACTUAL

	ACTUAL															
		March		April		May	June			July		August		September		October
		2013		2013		2013		2013		2013		2013		2013		2013
Fossil Fuel	5	105,187,323	5	91,876,870	5	96,203,342	5	124,976,097	\$	138,955,729	S	134,770,590	\$	108,095,204	S	96,423,004
Nuclear Fuel	\$	12,195,462	\$	111,5542,621	5	10,962,560	5	14,761,640	\$	16,348,895	5	15,487,581	\$	13,579,070	5	12,578,269
Coal Blending Savings Allocations	\$	(1,163,771)	5	(1,325,411)	5	(1,493,125)	\$	(1,892,498)	5	(1,792,920)	\$	(1,765,721)	\$	(1,169,748)	\$	(1,717,654)
Coal Purchase Savings Allocations	\$	651,335	5	77,714	S	(227,577)	\$	1,761,961	\$	(47,190)	5	(162,037)	\$	513,384	5	(209,107)
Gas Savings Allocations	\$	(738,047)	5	(78,202)	\$	(69,022)	\$	(78,923)	\$	(80,619)	\$	(73,571)	\$	(77,333)	S	(84,717)
Nuclear Fuel Savings Allocations	\$		\$		5	=	\$	9	S	₩,	\$		S	-	5	=
Purchased & Interchange Power	5	40,417,205	5	16,895,548	5	27,855,841	5	21,117,955	5	27,227,787	5	29,984,212	\$	20,695,746	\$	18,165,678
Sub-Total	5	156,549,507	5	118,989,140	5	133,232,019	5	160,646,232	\$	180,611,682	5	178,241,054	5	141,636,323	S	125,155,473
Off-System Sales	5	(111,6222,842)	5	(15,683,151)	5	(111,7760,254)	5	(23,159,033)	S	(24,063,728)	S	(27,632,522)	\$	(14,344,063)	5	(14,164,285)
Total Fuel Costs	\$	144,926,665	5	103,305,989	5	121,471,765	5	137,487,199	\$	156,547,954	\$	150,608,532	S	127,292,260	S	110,991,188
Total System kWh Sales Excluding Off-Systems Sales		4,396,486,986	4,256,166,018		3,849,422,774		4,292,511,033			5,050,038,599		5,246,619,945		4,425,821,775		4,051,620,579
S.C. kWh Sales		474,712,940		554,895,417		452,740,595		466,779,249		602,531,741		613,182,769		518,884,686		500,618,334
S.C. Allocation Factor Note (1)		0.1080		0.1304		0.1176		0.1087		0.1193		0.1169		0.1172		0.1236
S.C. Retail Basis of Total Fuel Costs	\$	15,652,080	\$	13,471,101	S	14,285,080	5	14,944,859	5	18,676,171	S	17,606,137	5	14,918,653	5	13,718,511
Amount Billed to S.C. Customers	\$	12,480,106	\$	14,585,303	\$	111,898,301	S	12,303,449	5	17,530,871	\$	17,845,407	\$	15,099,732	S	14,567,197
Deferred Fuel Entry	\$	(3,171,974)	\$	1,114,202	S	(2,386,779)	5	(2,641,410)	S	(1,145,300)	\$	239,270	S	181,079	\$	848,686
Cumulative Over/(Under) Recovery- Prior Month	\$	895,511	\$	(2,276,463)	\$	(1,162,261)	5	(3,549,040)	S	(6,190,450)	\$	(7,335,750)	\$	(7,096,480)	5	(6,715,658)
Company's Accounting Adjustments													\$	199,743 (1)	\$	13,274 (2
ORS Adjustments					2											
Cumulative Over/(Under) Recovery	_\$_	(2,276,463)	\$	(1,162,261)	\$	(3,549,040)	\$	(6,190,450)	S	(7,335,750)	S	(7,096,480)	\$	(6,715,658)	S	(5,853,698)

Note (1) - S.C. Allocation Factor= S.C. Retail Sales / Total System Sales

Duke Energy Progress, Inc. South Carolina Fuel Cost Computation March 2013 - June 2014 Docket No. 2014-1-E

			AC	TUAL			ESTIMATED									
		November	December		January February				March	April			May		June	
		2013	2013		2014		2014	2014			2014		2014		2014	
Fossil Fuel	\$	1117,086,9111	\$ 1111997711,279	S	228,918,358	\$	111/7,7760,544	\$	137,776,714	\$	83,741,033	\$	87,628,760	\$	124,080,203	
Nuclear Fuel	\$	11,895,873	\$ 15,113,469	\$	16,231,959	\$	14,943,059	\$	9,993,487	\$	13,727,075	\$	13,824,784	\$	13,688,568	
Coal Blending Savings Allocations	\$	(2,511,901)	\$ (2,192,914)	\$	(1,115,355)	\$	(763,001)	\$	(907,134)	\$	(2,077,194)	\$	(2,093,376)	\$	(2,127,210)	
Coal Purchase Savings Allocations	\$	223,092	\$ 694,639	\$	857,747	\$	599,585	\$	29,808	\$	553,025	\$	529,680	\$	504,0111	
Gas Savings Allocations	\$	(712,566)	\$ (790,007)	\$	(3,091,892)	\$	(683,980)	\$	(719,690)	\$	(16,029)	\$	(40,718)	\$	(46,192)	
Nuclear Fuel Savings Allocations	\$	-	\$ 220,526	\$	(153)	\$		\$	1,635,861	\$	(1,243,898)	\$		\$	-	
Purchased & Interchange Power	\$	25,578,318	\$ 22,340,333	\$	87,646,0111	\$	33,019,235	\$	40,484,955	\$	16,488,297	\$	20,358,001	\$	25,646,613	
Sub-Total	\$	151,559,727	\$ 147,357,325	\$	329,446,675	\$	164,875,442	\$	188,294,001	\$	1111,1722,309	\$	120,207,131	\$	161,745,993	
Off-System Sales	\$	(15,633,999)	\$ (22,265,629)	\$	(46,021,193)	\$	(22,880,038)	\$	(17,939,815)	\$	(15,265,558)	\$	(17,043,037)	\$	(33,088,879)	
Total Fuel Costs	\$	135,925,728	\$ 125,091,696	\$	283,425,482	\$	141,995,404	\$	170,354,186	\$	95,906,751	\$	103,164,094	- \$	128,657,1114	
Total System kWh Sales Excluding Off-System Sales		3,941,130,262	4,605,941,090		5,389,113,675		4,912,803,218		4,396,971,975	3	,684,122,704		4,236,064,441		4,858,782,381	
S.C. kWh Sales		468,689,255	 498,489,160		612,208,970		570,388,942		512,144,615		450,967,276		509,440,381		559,031,474	
S.C. Allocation Factor Note (1)		0.1189	 0.1082		0.1136		0.1161		0.1165		0.1224		0.1203		0.1151	
S.C. Retail Basis of Total Fuel Costs	\$	16,161,569	\$ 13,534,922	\$	32,197,135	\$	16,485,666	\$	19,846,263	\$	111,7738,986	\$	12,410,641	\$	14,808,434	
Amount Billed to S.C. Customers	\$	13,640,456	\$ 14,510,226	\$	17,821,599	\$	16,603,343	\$	14,906,523	\$	14,906,523	\$	14,906,523	\$	14,906,523	
Deferred Fuel Entry	\$	(2,521,113)	\$ 975,304	\$	(14,375,536)	\$	11177,677	\$	(4,939,740)	\$	3,167,537	\$	2,495,882	\$	98,089	
Cumulative Over/(Under) Recovery- Prior Month	\$	(5,853,698)	\$ (8,37/4,8111)	\$	(7,399,507)	S	(21,775,043)	\$	(21,559,994)	\$	(24,482,480)	\$	(21,314,943)	\$	(18,819,061)	
Company's Accounting Adjustments							97,372 (3)) \$	1,673,255 (4)							
ORS Adjustments				2	T 700 0000			\$	343,999 (5)				690			
Cumulative Over/(Under) Recovery		(8,37/4,8111)	\$ (7,399,507)	\$	(21,775,043)	\$	(21,559,994)	\$	(24,482,480)	\$	(21,314,943)	\$	(18,819,061)	\$	(18,720,972)	

Note (1) - S.C. Allocation Factor= S.C. Retail Sales / Total System Sales

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Cumulative Over/(Under) Base Fuel Component (per Audit Exhibit JWC-5)	\$ (21,559,994)	\$ (18,720,972)
Cumulative Over/(Under) Environmental Component (per Audit Exhibit JWC-7)	\$ 558,581	\$ 434,103
Net Cumulative Base Fuel and Environmental Components Over/(Under)- Recovery Balances	\$ (21,001,413)	\$ (18,286,869)

Duke Energy Progress, Inc. Total Environmental Costs March 2013 - February 2014 Docket No. 2014-1-E

Used for Environmental Cost Factor:

	Magnesium H	vdrovide and	SO ₂ &	NO					Fn	Total vironmental
<u>Month</u>		Calcium Carbonate		llowances	Ammonia	a & Urea	Limesto	Eu	Costs	
	\$	%	\$	%	\$	%	S	%		\$
Mar-13	125,643	10.25%	33,524	2.74%	431,124	35.18%	635,106	51.83%		1,225,397
Apr-13	167,936	13.94%	53,003	4.40%	383,748	31.86%	599,901	49.80%		1,204,588
May-13	183,573	16.06%	58,233	5.09%	327,622	28.66%	573,775	50.19%		1,143,203
Jun-13	352,541	18.58%	92,491	4.87%	497,021	26.20%	955,277	50.35%		1,897,330
Jul-13	358,222	18.02%	110,320	5.55%	542,736	27.29%	977,085	49.14%		1,988,363
Aug-13	410,591	19.72%	105,829	5.08%	530,184	25.47%	1,035,135	49.73%		2,081,739
Sep-13	283,453	18.78%	84,764	5.61%	374,580	24.81%	766,915	50.80%		1,509,712
Oct-13	172,355	13.56%	40,860	3.22%	312,072	24.56%	745,444	58.66%		1,270,731
Nov-13	220,530	12.08%	48,801	2.67%	538,374	29.49%	1,018,141	55.76%		1,825,846
Dec-13	282,468	17.11%	33,739	2.05%	481,111	29.14%	853,503	51.70%		1,650,821
Jan-14	390,718	16.78%	33,618	1.44%	695,046	29.84%	1,209,659	51.94%		2,329,041
Feb-14	365,102	17.25%	47,272	2.23%	 599,405	28.33%	1,104,387	52.19%		2,116,166
Totals	\$ 3,313,132	16.37%	\$ 742,454	3.67%	\$ 5,713,023	28.22%	\$ 10,474,328	51.74%	\$	20,242,937

Duke Energy Progress, Inc. Details of Environmental Costs March 2013 - June 2014 Docket No. 2014-1-E

Actual Mar-13 Apr-13 May-13 Jun-13 Jul-13 Aug-13 Sep-13 Oct-13 Magnesium Hydroxide and Calcium Carbonate \$ 125,643 \$ 167,936 \$ 183,573 \$ 352,541 \$ 358,222 \$ 410,591 \$ 283,453 \$ 172,355 SO₂ & NO_x Emission Allowances \$ 33,524 \$ 53,003 \$ 58,233 \$ 92,491 \$ 110,320 S 105,829 \$ 84,764 \$ 40,860 Ammonia & Urea \$ 431,124 \$ 383,748 \$ 327,622 \$ 497,021 \$ 542,736 \$ 530,184 \$ 374,580 \$ 312,072 Limestone 635,106 \$ 599,901 \$ 573,775 \$ 955,277 \$ 977,085 \$ 1,035,135 \$ 766,915 \$ 745,444 Sub-Total 1.225.397 \$ 1,204,588 \$ 1.143.203 \$ 1,897,330 \$ 1.988.363 \$ 2,081,739 \$ 1,509,712 \$ 1,270,731 **Off-System Sales** \$ (4,620) \$ (195,828) \$ (73,424) \$ (330.019) \$ (277.483) \$ (402,273) \$ (72,153) \$ (206,317)8,534 \$ (20,911) \$ (5,741) \$ 12,505 \$ 38,688 \$ 46,914 \$ 97,156 **Reagent Savings Allocations** 7,166 \$ 1,579,816 \$ 1,749,568 \$ 1,686,632 \$ **Total Environmental Cost** \$ 1,229,311 \$ 987,849 \$ 1,064,038 \$ 1,484,473 \$ 1,161,570 S.C. Retail kWh Sales 554,895,417 466,779,249 602,531,741 474,712,940 452,740,595 613,182,769 518,884,686 500,618,334 5,050,038,599 Total System kWh Sales Excluding Off-System Sales 4,396,486,986 4,256,166,018 3,849,422,774 4,292,511,033 5,246,619,945 4,425,821,775 4,051,620,579 S.C. Allocation Factor Note (2) 0.1080 0.1304 0.1176 0.1087 0.1193 0.1169 0.1172 0.1236 208.723 S 173.980 \$ S.C. Retail Basis of Total Environmental Costs 132,766 \$ 128,816 \$ 125.131 \$ 171,726 \$ 197.167 S 143,570 195,911 \$ 175,781 \$ Amount Billed to S.C. Customers \$ ___192,428 \$ 179,334 \$ 148,580 \$ 169,272 \$ 220,487 \$ 166,535 \$ 23,320 \$ 1.801 \$ Over/(Under) Recovery 59,662 \$ 50,518 \$ 23,449 \$ (2,454) \$ (12,812) \$ 22,965 Cumulative Over/(Under) Recovery - Prior Month 318,611 \$ 378,273 \$ 428,791 \$ 452,240 \$ 449,786 \$ 436,974 \$ 460,294 \$ 462,095 428,791 \$ 452,240 \$ 449,786 \$ 436,974 \$ 460,294 \$ 462,095 \$ 485,060 Cumulative Over/(Under) Recovery \$ 378,273 \$

Duke Energy Progress, Inc. Details of Environmental Costs March 2013 - June 2014 Docket No. 2014-1-E

	Actual												Estimated								
		<u>Nov-13</u>		<u>Dec-13</u>		<u>Jan-14</u>		Feb-14		Ī	<u> Mar-14</u>	<u>Apr-14</u>			May-14		Jun-14				
Magnesium Hydroxide and Calcium Carbonate	\$	220,530	\$	282,468	\$	390,718	\$	365,102	\$	S	540,633	\$	128,372	\$	184,596	\$	289,470				
SO ₂ & NOx Emission Allowances	\$	48,801	\$	33,739	\$	33,618	\$	47,272	\$	3	50,088	\$	17,550	\$	36,395	\$	66,223				
Ammonia & Urea	\$	538,374	\$	481,111	\$	695,046	\$	599,405	\$	ì	666,655	\$	358,601	\$	436,203	S	572,600				
Limestone	\$	1,018,141	\$	853,503	\$	1,209,659	\$	1,104,387	_\$	<u> </u>	1,469,186	\$	500,906	\$	777,463	S	1,314,798				
Sub-Total	\$	1,825,846	\$	1,650,821	\$	2,329,041	\$	2,116,166	\$	3	2,726,562	\$	1,005,429	\$	1,434,657	\$	2,243,091				
Off-System Sales	\$	(188,589)	\$	(301,157)	\$	(105,062)	\$	(126,872)	\$	i	(68,558)	\$	(5,576)	\$	(12,601)	\$	(9,638)				
Reagent Savings Allocations	_\$_	115,454	\$	(753,103)	\$	(15,114)	\$	(12,699)	_\$	<u> </u>	(147,338)	\$	(13,907)	\$	(13,907)	\$	(13,907)				
Total Environmental Cost	\$	1,752,711	\$	596,561	\$	2,208,865	\$	1,976,595	\$	3	2,510,666	\$	985,946	\$	1,408,149	\$	2,219,546				
S.C. Retail kWh Sales	4	168,689,255	4	98,489,160	(512,208,970		570,388,942		5	12,144,615		450,967,276		509,440,381		559,031,474				
Total System kWh Sales Excluding Off-System Sales	3,9	41,130,262	4,6	05,941,090	5,3	389,113,675	4	,912,803,218	î	4,39	96,971,975	3	,684,122,704	4	4,236,064,441	4,	,858,782,381				
S.C. Allocation Factor Note (2)		0.1189		0.1082		0.1136		0.1161			0.1165		0.1224		0.1203		0.1151				
S.C. Retail Basis of Total Environmental Costs	\$	208,397	\$	64,548	\$	250,927	\$	229,483	\$	3	292,493	\$	120,680	\$	169,400	S	255,470				
Amount Billed to S.C. Customers	\$	159,301	\$	201,736	\$	239,306	\$	226,533	_\$	<u> </u>	191,540	\$	139,897	\$	162,948	\$	219,180				
Over/(Under) Recovery	\$	(49,096)	\$	137,188	\$	(11,621)	\$	(2,950)	\$	3	(100,953)	\$	19,217	\$	(6,452)	\$	(36,290)				
Cumulative Over/(Under) Recovery - Prior Month	\$	485,060	\$	435,964	\$	573,152	\$	561,531	\$	ì	558,581	\$	457,628	\$	476,845	\$	470,393				
Cumulative Over/(Under) Recovery	\$	435,964	\$	573,152	\$	561,531	\$	558,581	\$	3	457,628	\$	476,845	\$	470,393	\$	434,103				